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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.								
10/733,499	12/10/2003	Eugene C. Pikus	A39.2-11304US01	9230								
65282 ATK c/o VIDAS, ARRETT & STEINKRAUS, P.A. 6109 BLUE CIRCLE DRIVE SUITE 2000 MINNETONKA, MN 55343	7590 03/07/2007		<table border="1"><tr><td colspan="2">EXAMINER</td></tr><tr><td colspan="2">CLEMENT, MICHELLE RENEE</td></tr><tr><td>ART UNIT</td><td>PAPER NUMBER</td></tr><tr><td>3641</td><td></td></tr></table>		EXAMINER		CLEMENT, MICHELLE RENEE		ART UNIT	PAPER NUMBER	3641	
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SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE									
3 MONTHS		03/07/2007	PAPER									

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/733,499

Applicant(s)

PIKUS ET AL.

Examiner

Michelle (Shelley) Clement

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 19 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 21-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. With respect to withdrawn claims 19 and 20, the inventions are distinct as shown in the office action dated 12/6/05, the election was made without traverse and the claims have been held withdrawn to a nonelected invention.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-18 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cumming et al. (US Patent # 4,144,815) in view of Keil (US Patent # 6,176,168). Cumming et al. discloses the claimed system and method for utilizing the system for programming a fuze comprising a fuze having a (radio frequency) receiver/transceiver, the receiver located within the fuze, a fuze setter having a (radio frequency) transmitter/transceiver, wherein pre-launch fuze setting data is transmitted from the transmitter to the receiver via an RF electromagnetic signal. The transmitter comprises a modulation circuit and an antenna and analog to digital converter. The fuze setting data is transmitted via a frequency modulated carrier signal by shifting the frequency. Although Cumming et al. does not expressly disclose the system wherein the fuze further includes an inductive power transmitter and an inductive power receiver for inductively

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transmitting power to the fuze and the fuze setter including magnetic transducer, and operational power for the fuze is inductively transmitted from the fuze setter to the fuze, a receiver and a talkback signal sent from the fuze transceiver to the fuze setter transceiver, Keil et al. does. Keil et al. teaches an improved circuitry for a system wherein a fuze has a receiver and a transmitter and a fuze setter has a receiver and transmitter, wherein pre-launch fuze setting data is transmitted to the fuze and a talkback signal is sent from the fuze to the fuze setter in order to improve communication between the fuze and the fuze setter. Keil et al. further teaches a system wherein operational power for the fuze is inductively transmitted from the fuze setter to the fuze and digital-to-analog converters. Keil et al. and Cumming et al. are analogous art because they are from the same field of endeavor: fuze setting. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the talkback features, the inductive operational power transmission, and digital-to-analog converters as suggested by Keil et al. with the system as taught by Cumming et al. The suggestion/motivation for doing so would have been to obtain a fuze setting system that could effectively communicate between the fuze and the setter yet was safe and did not contain internal power prior to programming. It is noted that the [a) statements of intended use or field of use, b)"adapted to" or "adapted for" clauses, c) "wherein" clauses, or d) "whereby"] clauses are essentially method limitations or statements of intended or desired use. Thus, these claims as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference. See In re Pearson, 181 USPQ 641; In re Yanush, 177 USPQ 705; In re Finsterwalder, 168 USPQ 530; In re Casey, 512 USPQ 235; In re Otto, 136 USPQ 458; Ex parte Masham, 2 USPQ 2nd 1647.

See MPEP § 2114 which states:

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A claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus” if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ 2nd 1647

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than functions. *In re Danly*, 120 USPQ 528, 531.

Apparatus claims cover what a device is not what a device does. *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 15 USPQ2d 1525, 1528.

As set forth in MPEP § 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

*Cumming et al.* and *Keil et al.* disclose the claimed invention except for the express optimum bits/second. It would have been obvious to one of ordinary skill in the art at the time the invention was made to increase the number of bits/second that could be transmitted and to place the transmitter at an optimum distance from the receiver, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges and discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Aller*, 105 USPQ 233 and *In re Boesch*, 617 F.2d 272.

4. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Cumming et al.* and *Keil et al.* as applied to claim 24 above, and further in view of *Koerner et al.* (US Patent # 4,495,851). Although neither *Cumming et al.* nor *Keil et al.* expressly disclose the electromagnetic signal having a frequency ranging from greater than 100kHz to 100PHz, *Koerner et al.* does. *Koerner et al.* teaches a system for programming a fuze comprising a fuze comprising a receiver, the receiver located within the fuze, and a fuze setter having a transmitter, wherein the transmitter transmits an electromagnetic signal comprising pre-launch fuze setting data and the receiver receives the electromagnetic signal, wherein the electromagnetic signal has a frequency ranging from greater than 100 kHz to 100 PHz. *Koerner et al.*, *Keil et al.* and

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Cumming et al. are analogous art because they are from the same field of endeavor: fuze setters. Therefor, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the specific frequency range as suggested by Koerner et al. with the system as disclosed by Cumming et al. as modified by the suggestion of Keil et al. The suggestion/motivation for doing so would have been to obtain a fuze setting system that had an optimum frequency that could not be interrupted.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

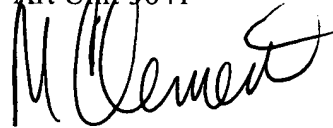
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle (Shelley) Clement whose telephone number is 571.272.6884. The examiner can normally be reached on Monday thru Thursday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571.272.6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michelle (Shelley) Clement  
Primary Examiner  
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A handwritten signature in black ink, appearing to read "M Clement", is written over the printed name and title.